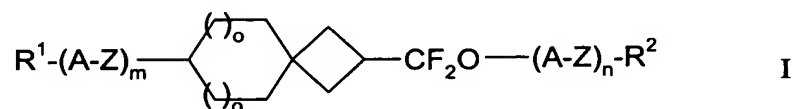



This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Original) Cyclobutane derivatives of the formula I



in which

$R^1, R^2$  are identical or different and each, independently of one another, denote H, halogen (F, Cl, Br or I) or a linear or branched, optionally chiral alkyl or alkoxy radical having 1 to 15 C atoms which is unsubstituted or mono- or polysubstituted by halogen and in which one or more  $\text{CH}_2$  groups may each be replaced, independently of one another, by  $-\text{O}-$ ,  $-\text{S}-$ ,  $-\text{CO}-$ ,  $-\text{CO}-\text{O}-$ ,  $-\text{O}-\text{CO}-$ ,  $-\text{O}-\text{CO}-\text{O}-$ ,  $-\text{CH}=\text{CH}-$ ,  $-\text{CH}=\text{CF}-$ ,  $-\text{CF}=\text{CF}-$ ,  $-\text{C}\equiv\text{C}-$  or  in such a way that heteroatoms are not linked directly to one another,  $-\text{CN}$ ,  $-\text{SCN}$ ,  $-\text{NCS}$ ,  $-\text{SF}_5$ ,  $-\text{SCF}_3$ ,  $-\text{CF}_3$ ,  $-\text{CF}=\text{CF}_2$ ,  $-\text{CF}_2\text{CF}_2\text{CF}_3$ ,  $-\text{OCF}_3$ ,  $-\text{OCHF}_2$ ,  $-\text{CF}_2\text{CH}_2\text{CF}_3$  or  $-\text{OCH}_2\text{CF}_2\text{CHF}_2$ ,

A is identical or different and in each case, independently of one another, denotes

- a) trans-1,4-cyclohexylene, in which, in addition, one or more non-adjacent  $\text{CH}_2$  groups may be replaced by  $-\text{O}-$  and/or  $-\text{S}-$  and in which, in addition, one or more H atoms may be replaced by F,
- b) 1,4-phenylene, in which one or two CH groups may be replaced by N and in which, in addition, one or more H atoms may be replaced by halogen (F, Cl, Br or I),  $-\text{CN}$ ,  $-\text{CH}_3$ ,  $-\text{CHF}_2$ ,  $-\text{CH}_2\text{F}$ ,  $-\text{OCH}_3$ ,  $-\text{OCHF}_2$  or  $-\text{OCF}_3$ ,

c) a radical from the group bicyclo[1.1.1]pentane-1,3-diyl, bicyclo[2.2.2]octane-1,4-diyl, spiro[3.3]heptane-2,6-diyl, naphthalene-2,6-diyl, decahydronaphthalene-2,6-diyl, 1,2,3,4-tetrahydronaphthalene-2,6-diyl and piperidine-1,4-diyl, or

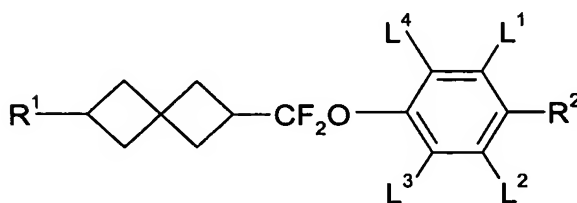
d) 1,4-cyclohexenylenyl,

Z is identical or different and in each case, independently of one another, denotes -O-, -CH<sub>2</sub>O-, -OCH<sub>2</sub>-, -CO-O-, -O-CO-, -CF<sub>2</sub>O-, -OCF<sub>2</sub>-, -CF<sub>2</sub>CF<sub>2</sub>-, -CH<sub>2</sub>CF<sub>2</sub>-, -CF<sub>2</sub>CH<sub>2</sub>-, -CH<sub>2</sub>CH<sub>2</sub>-, -CH=CH-, -CH=CF-, -CF=CH-, -CF=CF-, -CF=CF-COO-, -O-CO-CF=CF-, -C≡C- or a single bond,

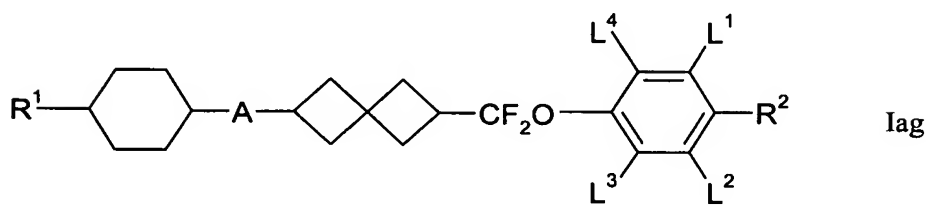
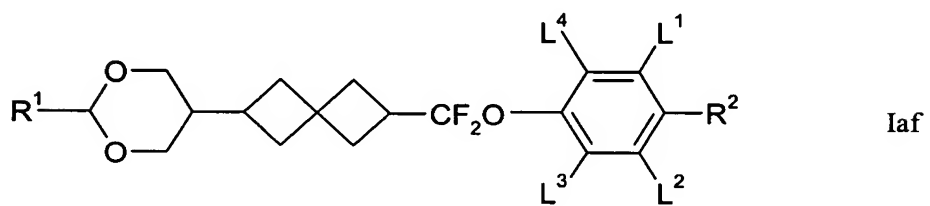
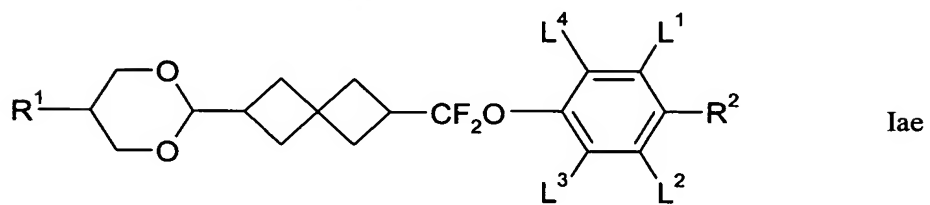
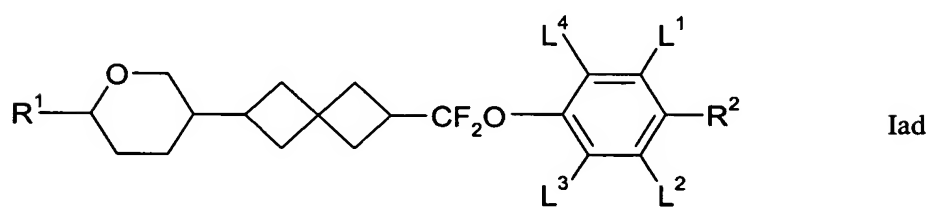
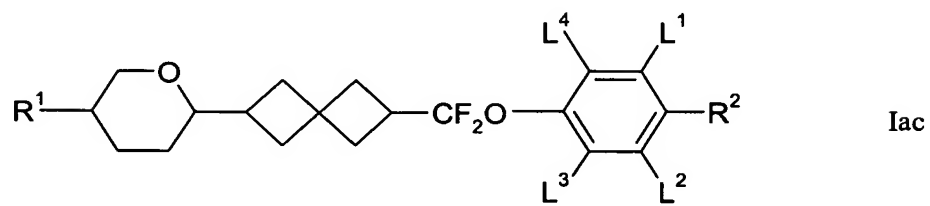
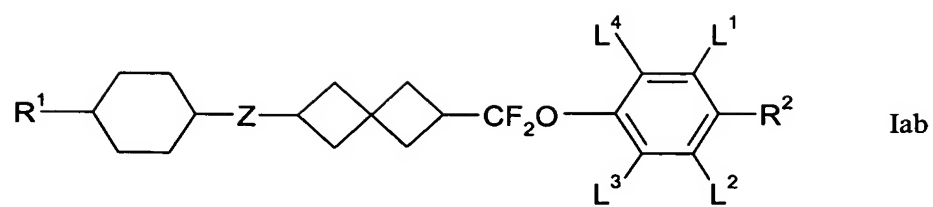
m, n are identical or different and, independently of one another, denote 0, 1 or 2, and

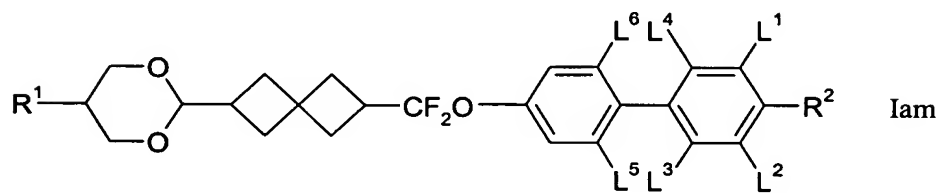
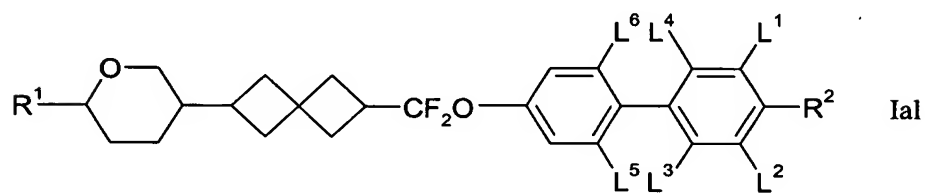
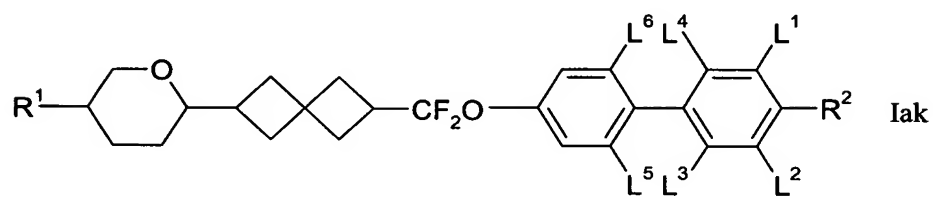
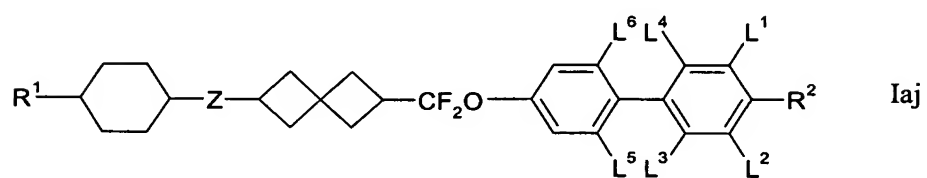
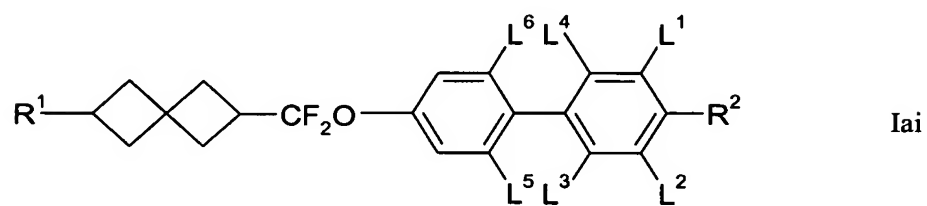
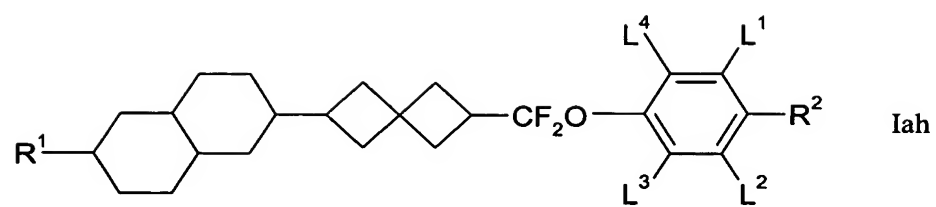
o denotes 0 or 1.

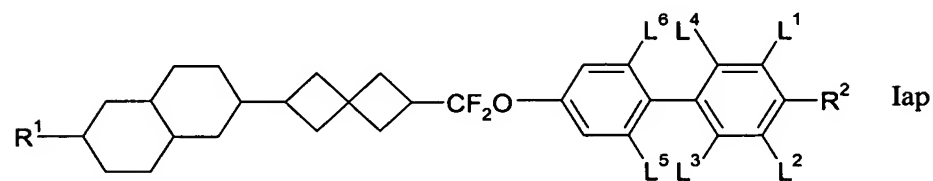
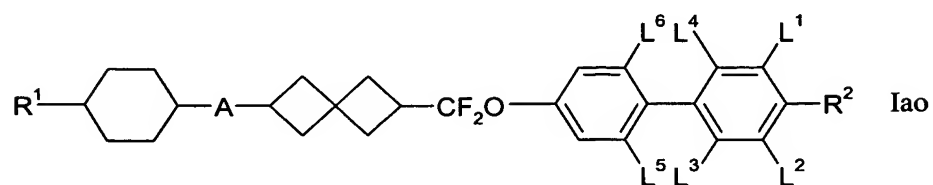
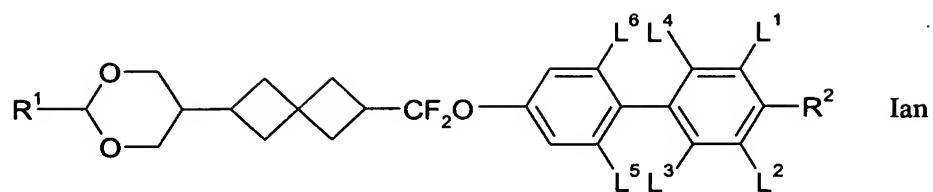
2. (Original) Compounds according to Claim 1, characterised in that both o denote 0.
3. (Original) Compounds according to Claim 1, characterised in that both o denote 1.
4. (Original) Compounds according to Claim 2, characterised in that they have one of the following formulae:



Ia

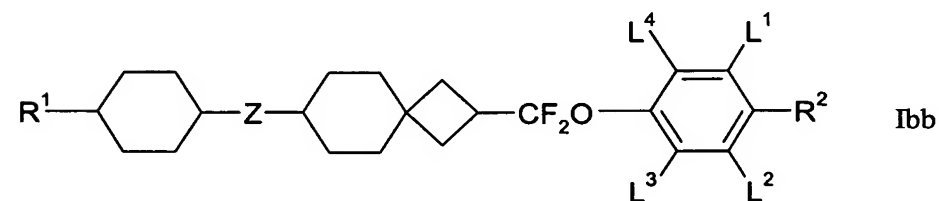
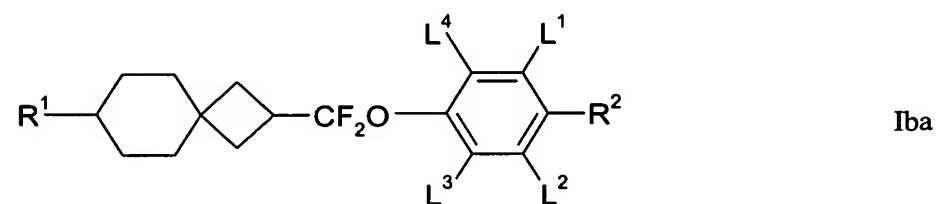


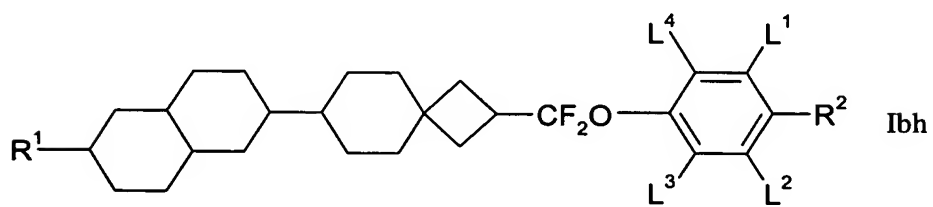
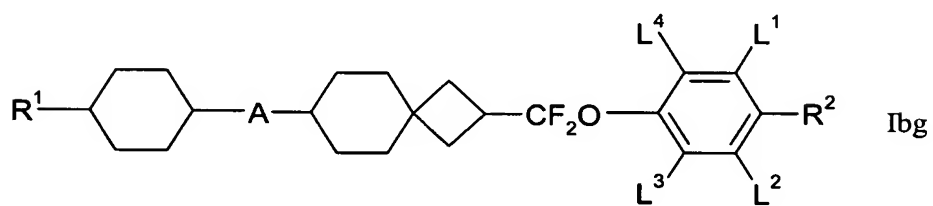
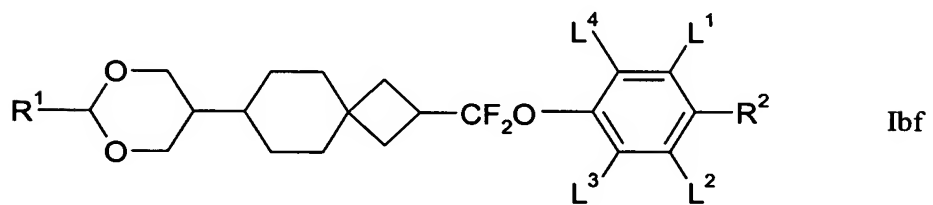
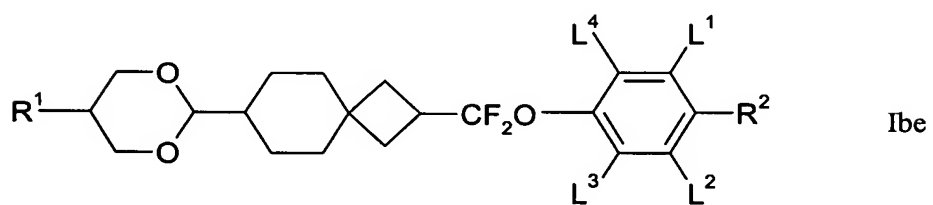
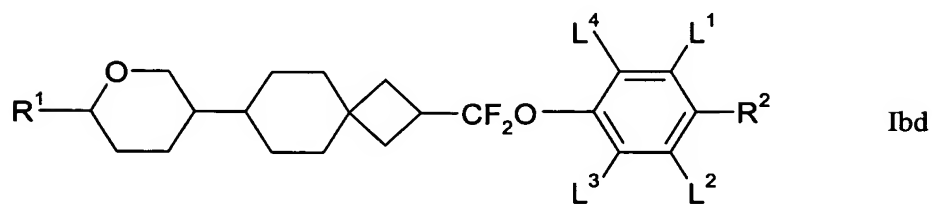
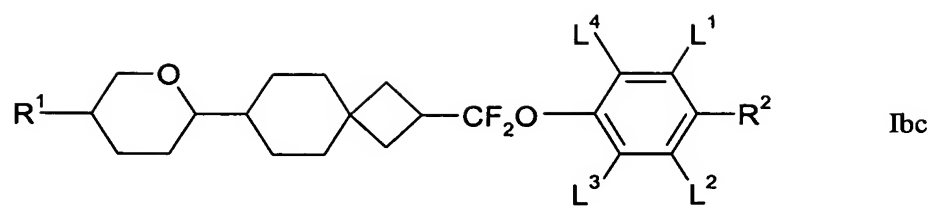




in which  $L^1, L^2, L^3, L^4, L^5$  and  $L^6$ , are identical or different and, independently of one another, denote H or F.

5. (Original) Compounds according to Claim 3, characterised in that they have one of the following formulae:

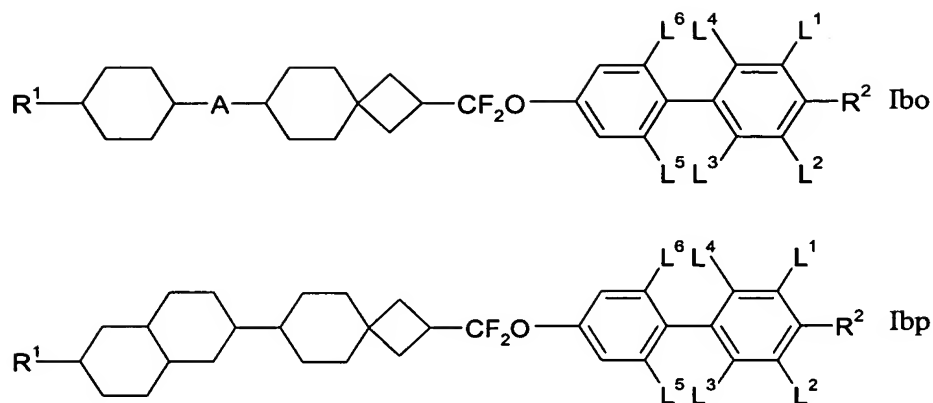




Ib1

$$\text{R}^1-\text{C}_6\text{H}_{10}-\text{Z}-\text{C}_6\text{H}_{10}-\text{C}_2\text{H}_4-\text{CF}_2\text{O}-\text{C}_{10}\text{H}_6-\text{R}^2 \quad \text{Ibj}$$
R1C1CCOC1C2CCC3C2CC3C(F)(F)OC4=CC=C5C(=C4)C(=C(C=C5)R2)C6=CC=C(C=C6)C7=CC=C(C=C7)C8=CC=C(C=C8)C9=CC=C(C=C9)C10=CC=C(C=C10)C11=CC=C(C=C11)C12=CC=C(C=C12)C13=CC=C(C=C13)C14=CC=C(C=C14)C15=CC=C(C=C15)C16=CC=C(C=C16)C17=CC=C(C=C17)C18=CC=C(C=C18)C19=CC=C(C=C19)C20=CC=C(C=C20)C21=CC=C(C=C21)C22=CC=C(C=C22)C23=CC=C(C=C23)C24=CC=C(C=C24)C25=CC=C(C=C25)C26=CC=C(C=C26)C27=CC=C(C=C27)C28=CC=C(C=C28)C29=CC=C(C=C29)C30=CC=C(C=C30)C31=CC=C(C=C31)C32=CC=C(C=C32)C33=CC=C(C=C33)C34=CC=C(C=C34)C35=CC=C(C=C35)C36=CC=C(C=C36)C37=CC=C(C=C37)C38=CC=C(C=C38)C39=CC=C(C=C39)C40=CC=C(C=C40)C41=CC=C(C=C41)C42=CC=C(C=C42)C43=CC=C(C=C43)C44=CC=C(C=C44)C45=CC=C(C=C45)C46=CC=C(C=C46)C47=CC=C(C=C47)C48=CC=C(C=C48)C49=CC=C(C=C49)C50=CC=C(C=C50)C51=CC=C(C=C51)C52=CC=C(C=C52)C53=CC=C(C=C53)C54=CC=C(C=C54)C55=CC=C(C=C55)C56=CC=C(C=C56)C57=CC=C(C=C57)C58=CC=C(C=C58)C59=CC=C(C=C59)C60=CC=C(C=C60)C61=CC=C(C=C61)C62=CC=C(C=C62)C63=CC=C(C=C63)C64=CC=C(C=C64)C65=CC=C(C=C65)C66=CC=C(C=C66)C67=CC=C(C=C67)C68=CC=C(C=C68)C69=CC=C(C=C69)C70=CC=C(C=C70)C71=CC=C(C=C71)C72=CC=C(C=C72)C73=CC=C(C=C73)C74=CC=C(C=C74)C75=CC=C(C=C75)C76=CC=C(C=C76)C77=CC=C(C=C77)C78=CC=C(C=C78)C79=CC=C(C=C79)C80=CC=C(C=C80)C81=CC=C(C=C81)C82=CC=C(C=C82)C83=CC=C(C=C83)C84=CC=C(C=C84)C85=CC=C(C=C85)C86=CC=C(C=C86)C87=CC=C(C=C87)C88=CC=C(C=C88)C89=CC=C(C=C89)C90=CC=C(C=C90)C91=CC=C(C=C91)C92=CC=C(C=C92)C93=CC=C(C=C93)C94=CC=C(C=C94)C95=CC=C(C=C95)C96=CC=C(C=C96)C97=CC=C(C=C97)C98=CC=C(C=C98)C99=CC=C(C=C99)C100=CC=C(C=C100)C101=CC=C(C=C101)C102=CC=C(C=C102)C103=CC=C(C=C103)C104=CC=C(C=C104)C105=CC=C(C=C105)C106=CC=C(C=C106)C107=CC=C(C=C107)C108=CC=C(C=C108)C109=CC=C(C=C109)C110=CC=C(C=C110)C111=CC=C(C=C111)C112=CC=C(C=C112)C113=CC=C(C=C113)C114=CC=C(C=C114)C115=CC=C(C=C115)C116=CC=C(C=C116)C117=CC=C(C=C117)C118=CC=C(C=C118)C119=CC=C(C=C119)C120=CC=C(C=C120)C121=CC=C(C=C121)C122=CC=C(C=C122)C123=CC=C(C=C123)C124=CC=C(C=C124)C125=CC=C(C=C125)C126=CC=C(C=C126)C127=CC=C(C=C127)C128=CC=C(C=C128)C129=CC=C(C=C129)C130=CC=C(C=C130)C131=CC=C(C=C131)C132=CC=C(C=C132)C133=CC=C(C=C133)C134=CC=C(C=C134)C135=CC=C(C=C135)C136=CC=C(C=C136)C137=CC=C(C=C137)C138=CC=C(C=C138)C139=CC=C(C=C139)C140=CC=C(C=C140)C141=CC=C(C=C141)C142=CC=C(C=C142)C143=CC=C(C=C143)C144=CC=C(C=C144)C145=CC=C(C=C145)C146=CC=C(C=C146)C147=CC=C(C=C147)C148=CC=C(C=C148)C149=CC=C(C=C149)C150=CC=C(C=C150)C151=CC=C(C=C151)C152=CC=C(C=C152)C153=CC=C(C=C153)C154=CC=C(C=C154)C155=CC=C(C=C155)C156=CC=C(C=C156)C157=CC=C(C=C157)C158=CC=C(C=C158)C159=CC=C(C=C159)C160=CC=C(C=C160)C161=CC=C(C=C161)C162=CC=C(C=C162)C163=CC=C(C=C163)C164=CC=C(C=C164)C165=CC=C(C=C165)C166=CC=C(C=C166)C167=CC=C(C=C167)C168=CC=C(C=C168)C169=CC=C(C=C169)C170=CC=C(C=C170)C171=CC=C(C=C171)C172=CC=C(C=C172)C173=CC=C(C=C173)C174=CC=C(C=C174)C175=CC=C(C=C175)C176=CC=C(C=C176)C177=CC=C(C=C177)C178=CC=C(C=C178)C179=CC=C(C=C179)C180=CC=C(C=C180)C181=CC=C(C=C181)C182=CC=C(C=C182)C183=CC=C(C=C183)C184=CC=C(C=C184)C185=CC=C(C=C185)C186=CC=C(C=C186)C187=CC=C(C=C187)C188=CC=C(C=C188)C189=CC=C(C=C189)C190=CC=C(C=C190)C191=CC=C(C=C191)C192=CC=C(C=C192)C193=CC=C(C=C193)C194=CC=C(C=C194)C195=CC=C(C=C195)C196=CC=C(C=C196)C197=CC=C(C=C197)C198=CC=C(C=C198)C199=CC=C(C=C199)C200=CC=C(C=C200)C201=CC=C(C=C201)C202=CC=C(C=C202)C203=CC=C(C=C203)C204=CC=C(C=C204)C205=CC=C(C=C205)C206=CC=C(C=C206)C207=CC=C(C=C207)C208=CC=C(C=C208)C209=CC=C(C=C209)C210=CC=C(C=C210)C211=CC=C(C=C211)C212=CC=C(C=C212)C213=CC=C(C=C213)C214=CC=C(C=C214)C215=CC=C(C=C215)C216=CC=C(C=C216)C217=CC=C(C=C217)C218=CC=C(C=C218)C219=CC=C(C=C219)C220=CC=C(C=C220)C221=CC=C(C=C221)C222=CC=C(C=C222)C223=CC=C(C=C223)C224=CC=C(C=C224)C225=CC=C(C=C225)C226=CC=C(C=C226)C227=CC=C(C=C227)C228=CC=C(C=C228)C229=CC=C(C=C229)C230=CC=C(C=C230)C231=CC=C(C=C231)C232=CC=C(C=C232)C233=CC=C(C=C233)C234=CC=C(C=C234)C235=CC=C(C=C235)C236=CC=C(C=C236)C237=CC=C(C=C237)C238=CC=C(C=C238)C239=CC=C(C=C239)C240=CC=C(C=C240)C241=CC=C(C=C241)C242=CC=C(C=C242)C243=CC=C(C=C243)C244=CC=C(C=C244)C245=CC=C(C=C245)C246=CC=C(C=C246)C247=CC=C(C=C247)C248=CC=C(C=C248)C249=CC=C(C=C249)C250=CC=C(C=C250)C251=CC=C(C=C251)C252=CC=C(C=C252)C253=CC=C(C=C253)C254=CC=C(C=C254)C255=CC=C(C=C255)C256=CC=C(C=C256)C257=CC=C(C=C257)C258=CC=C(C=C258)C259=CC=C(C=C259)C260=CC=C(C=C260)C261=CC=C(C=C261)C262=CC=C(C=C262)C263=CC=C(C=C263)C264=CC=C(C=C264)C265=CC=C(C=C265)C266=CC=C(C=C266)C267=CC=C(C=C267)C268=CC=C(C=C268)C269=CC=C(C=C269)C270=CC=C(C=C270)C271=CC=C(C=C271)C272=CC=C(C=C272)C273=CC=C(C=C273)C274=CC=C(C=C274)C275=CC=C(C=C275)C276=CC=C(C=C276)C277=CC=C(C=C277)C278=CC=C(C=C278)C279=CC=C(C=C279)C280=CC=C(C=C280)C281=CC=C(C=C281)C282=CC=C(C=C282)C283=CC=C(C=C283)C284=CC=C(C=C284)C285=CC=C(C=C285)C286=CC=C(C=C286)C287=CC=C(C=C287)C288=CC=C(C=C288)C289=CC=C(C=C289)C290=CC=C(C=C290)C291=CC=C(C=C291)C292=CC=C(C=C292)C293=CC=C(C=C293)C294=CC=C(C=C294)C295=CC=C(C=C295)C296=CC=C(C=C296)C297=CC=C(C=C297)C298=CC=C(C=C298)C299=CC=C(C=C299)C300=CC=C(C=C300)C301=CC=C(C=C301)C302=CC=C(C=C302)C303=CC=C(C=C303)C304=CC=C(C=C304)C305=CC=C(C=C305)C306=CC=C(C=C306)C307=CC=C(C=C307)C308=CC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Ibn



in which  $L^1$ ,  $L^2$ ,  $L^3$ ,  $L^4$ ,  $L^5$  and  $L^6$ , are identical or different and, independently of one another, denote H or F.

6. (Currently Amended) Compounds according to at least claim 1 ~~one of the preceding claims~~, characterised in that  $R^1$  denotes H or a linear alkyl radical having 1 to 10 C atoms.
7. (Currently Amended) Compounds according to claim 1 ~~at least one of the preceding claims~~, characterised in that  $R^2$  denotes H, a linear alkoxy radical having 1 to 10 C atoms, -F, -Cl, -CF<sub>3</sub>, -OCF<sub>3</sub>, -OCHF<sub>2</sub>, -CN, -NCS or -SF<sub>5</sub>.
8. (Currently Amended) Use of compounds of the formula I according to claim 1 ~~at least one of the preceding claims~~ as component(s) of liquid-crystalline media.
9. (Currently Amended) Liquid-crystalline medium having at least two liquid-crystalline components, characterised in that it comprises at least one compound of the formula I according to claim 1 ~~at least one of Claims 1 to 7~~.
10. (Original) Liquid-crystal display element, characterised in that it contains, as dielectric, a liquid-crystalline medium according to Claim 9.
11. (Original) Reflective or transflective liquid-crystal display element, characterised in that it contains, as dielectric, a liquid-crystalline medium according to Claim 9.



12. Electro-optical display element, characterised in that it contains, as dielectric, a liquid-crystalline medium according to Claim 9.